

4.0 TRANSPORTATION IMPACTS

The transportation impacts of the Preferred Alternative as described in Section 2.3 of this FEIS are discussed in this Chapter. The transportation impacts of Alternative 2 (Four Lane with Center Turn Lane) and Alternative 3 (Four Lane with Center Turn Lane and HOV) were analyzed and compared to Alternative 1 (No Build) in the DEIS. The transportation impacts of all three alternatives are shown again in this chapter to facilitate comparison and to provide information on the travel performance of potential HOV operations. Because the Idaho Transportation Department, in consultation with the Corridor Management Committee described in Section 2.2.2.2, may decide to implement HOV operations between McKercher Boulevard and Elkhorn Road in the future under the conditions described in Section 2.2.2.2, the transportation impacts of HOV operations for this section of SH-75 is included. These operations were analyzed under Alternative 3 in the DEIS.

4.1 Summary of Travel Performance Impacts

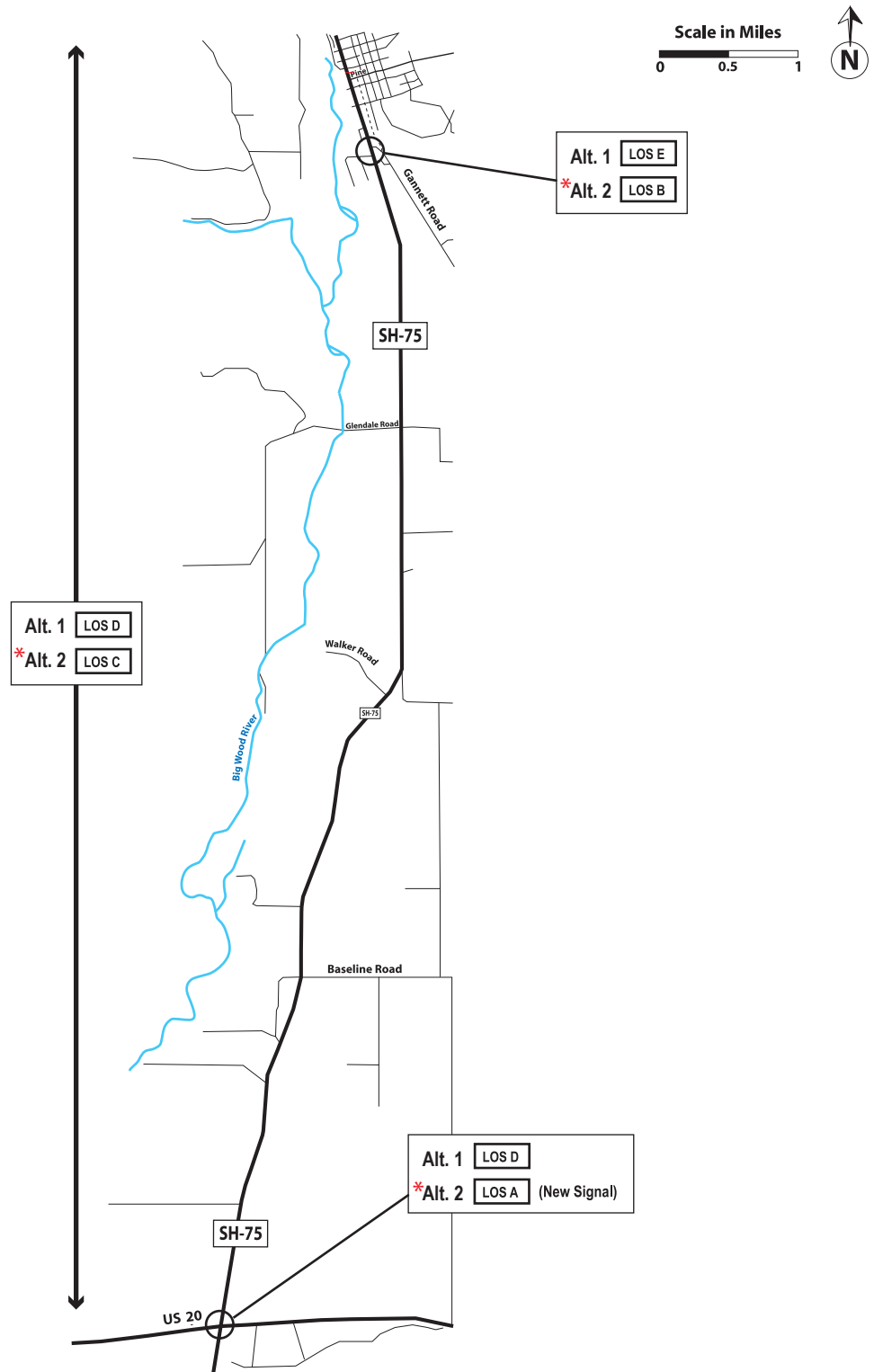
4.1.1 Level of Service and Travel Time

Figures 4-1 through 4-5 show the year 2025 Level of Service by geographic segment of SH-75 for the three alternatives considered in the DEIS. Compared to Alternative 1 No-Build, both Alternatives 2 and 3 provide improved Levels of Service for SH-75 mainline and intersections for the highway segment between US-20 and McKercher Boulevard in Hailey during both the peak hour and during non-peak times. Between McKercher Boulevard and Elkhorn Road, Preferred Alternative 2 provides substantially improved Levels of Service compared to Alternative 1. With HOV operations between McKercher Boulevard to Elkhorn Road, as analyzed under Alternative 3 in the DEIS, this geographic segment has LOS A for the HOV lane but LOS D between McKercher Boulevard and Ohio Gulch and LOS F from Ohio Gulch to Elkhorn Road for the general purpose lane.


Table 4-1: Summary of Peak Hour Travel Performance Information (Year 2025)

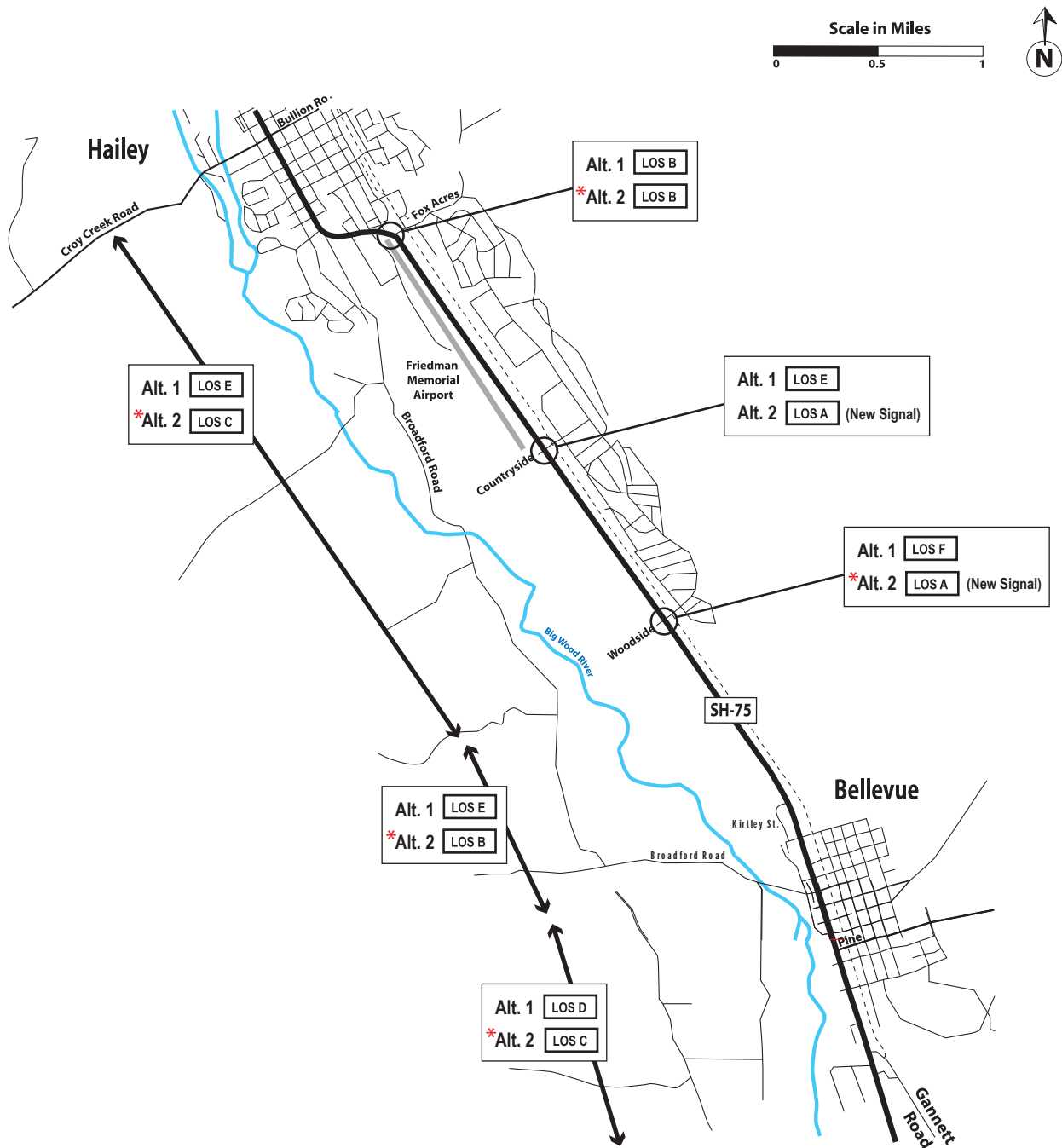
Criterion	Alternative 1: No-Build	Preferred Alternative 2: Four Lanes with Center Turn Lane	Alternative 3: Four Lanes with HOV and Center Turn Lane ¹⁷
Corridor Travel Time (minutes)	60	49	58 (60 General Purpose, 49 HOV)
Number of intersections at LOS E/F	10	1	8
Lane-miles at LOS E/F	7	0.1	10
Corridor Delay (vehicle hours in peak period)	349.1	149.7	265.9
Work Trip Person Trips – Drive Alone	25,200	25,100	24,600
Work Trip Person Trips - Carpool	10,400	10,500	10,850
Work Trip Person Trips - Transit	1,160	1,160	1,220
Percent of study area trips in carpools, transit	31%	32%	33%

¹⁷ As analyzed in the DEIS.




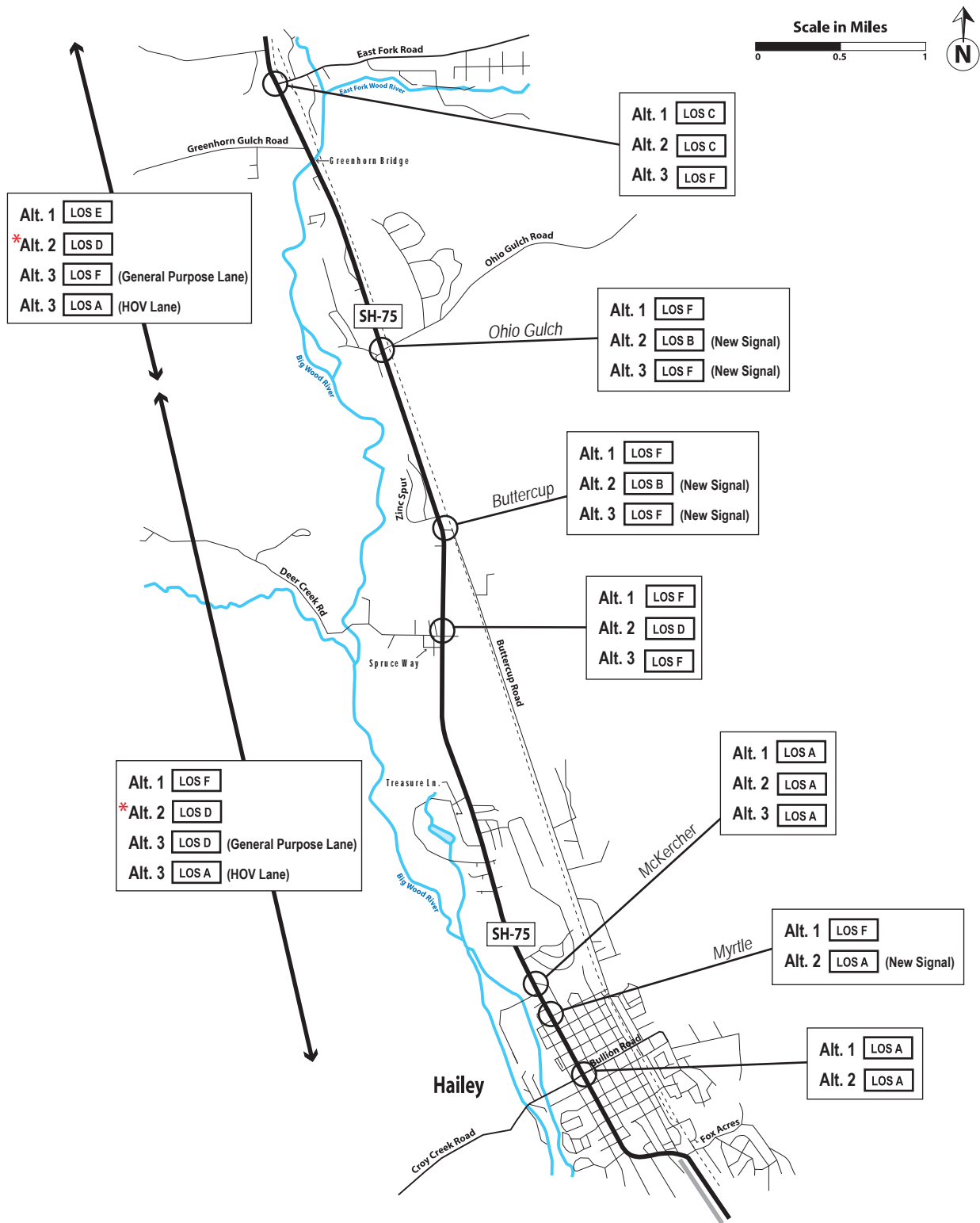
* Preferred Alternative

SH-75 Timmerman to Ketchum Final EIS		
	Project No. STP-F-2392(035) Key No. 3077	
	Title	Figure
	2025 Peak Hour Level of Service for Alternatives 1 and 2 US-20 to Gannett Road	4-1
		Date: February 2008



* Preferred Alternative


SH-75 Timmerman to Ketchum Final EIS		
 Project No. STP-F-2392(035) Key No. 3077		
Title 2025 Peak Hour Level of Service for Alternatives 1 and 2 Gannett Road to Fox Acres	Figure 4-2	
	Date: February 2008	

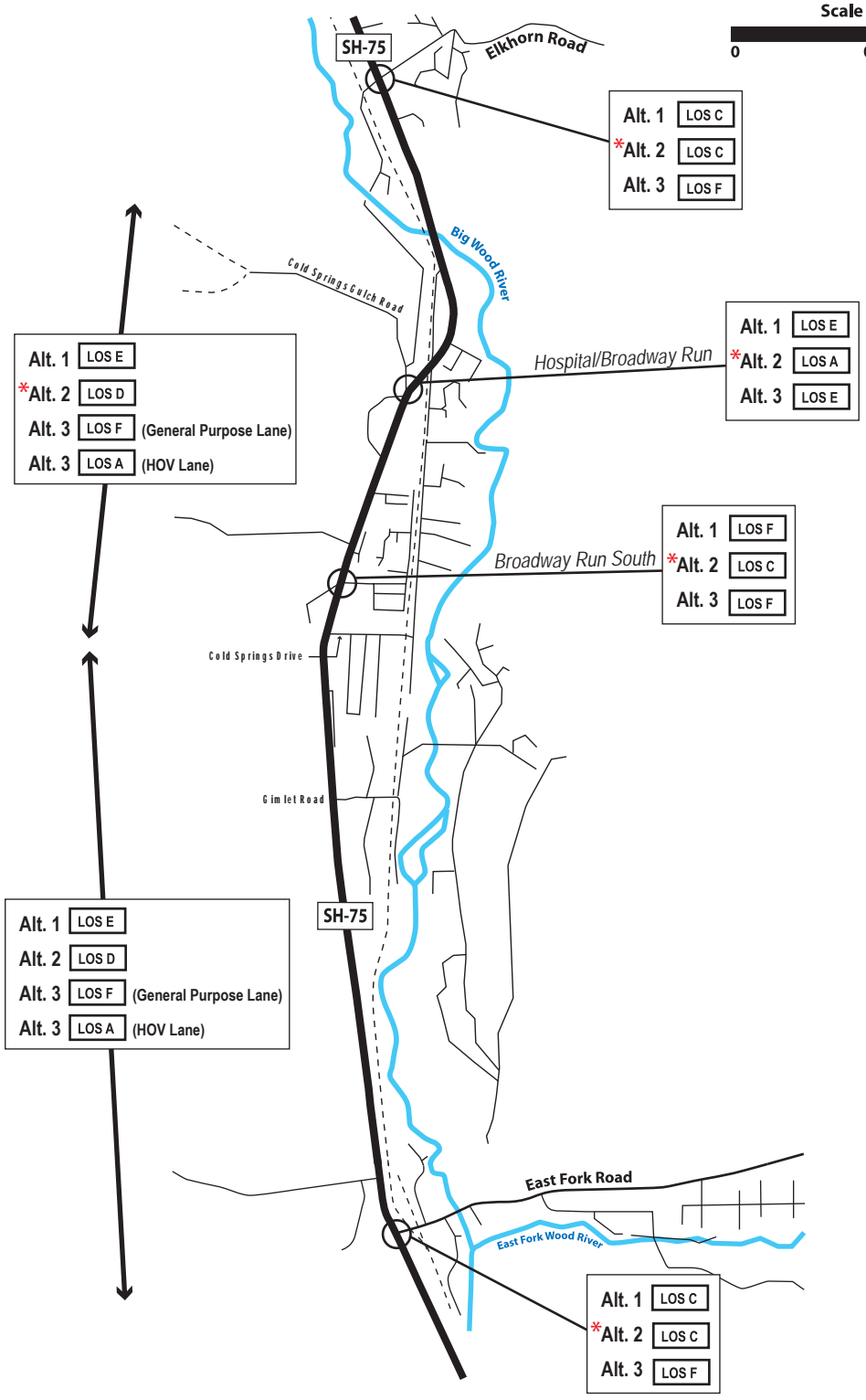
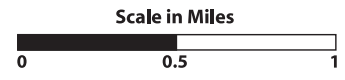


*** Preferred Alternative**

Note:

Alternative 3 LOS included showing impact of future conversion to HOV under conditions specified in section 2.2.2.2, page 2-6

SH-75 Timmerman to Ketchum Final EIS		
	Project No. STP-F-2392(035) Key No. 3077	
	Title	Figure
	2025 Peak Hour Level of Service for Alternatives 1, 2, 3 Fox Acres to East Fork Road	4-3 Date: February 2008



* Preferred Alternative

Note:

Alternative 3 LOS included showing impact of future conversion to HOV under conditions specified in section 2.2.2.2, page 2-6

SH-75 Timmerman to Ketchum Final EIS

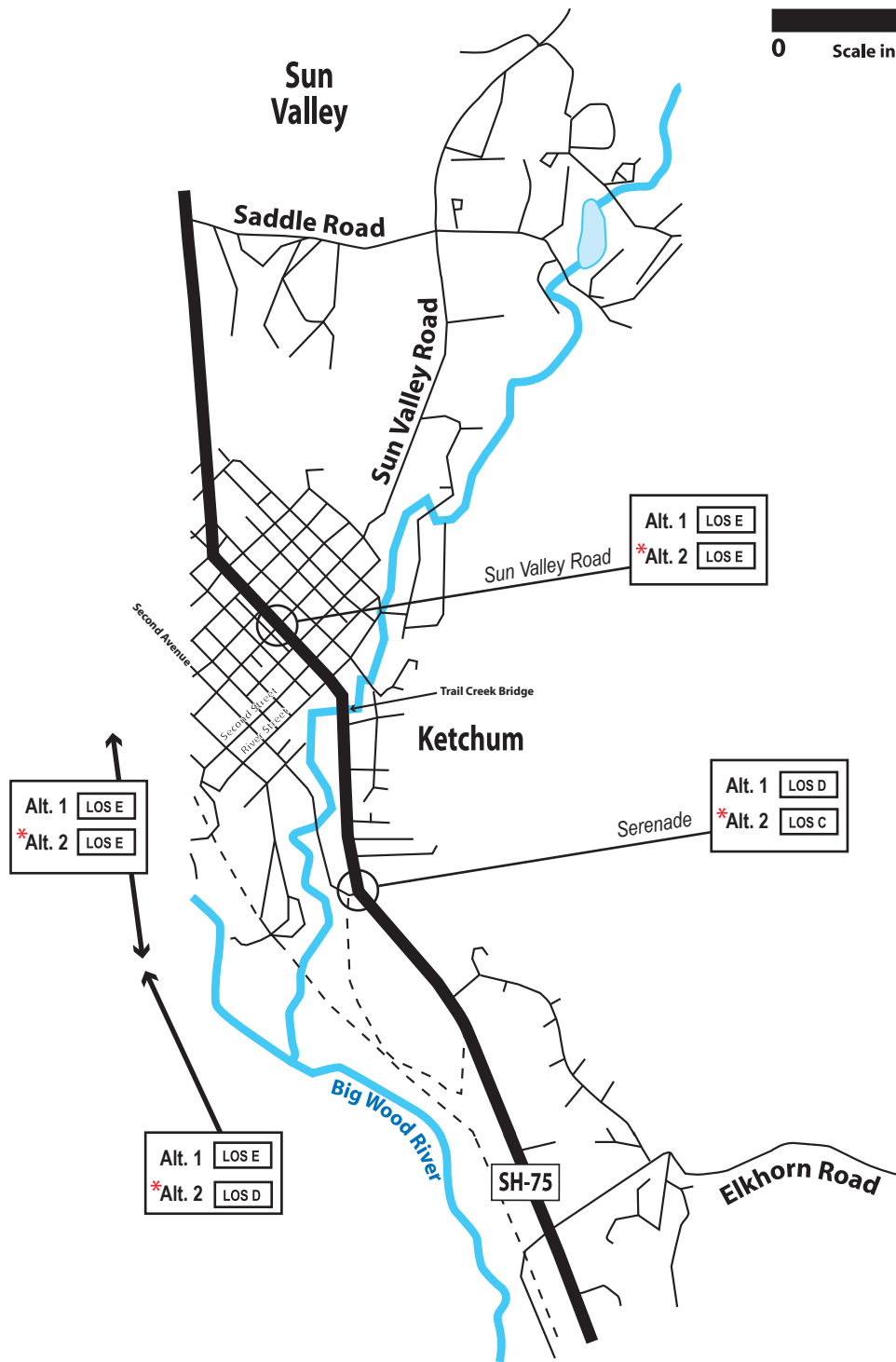


Project No. STP-F-2392(035)
Key No. 3077


Title
**2025 Peak Hour Level of Service
for Alternatives 1, 2, 3
East Fork Rd to Elkhorn Rd**

Figure
4-4

Date: *February 2008*



* Preferred Alternative

SH-75 Timmerman to Ketchum Final EIS		
	Project No. STP-F-2392(035) Key No. 3077	
	Title 2025 Peak Hour Level of Service for Alternatives 1, 2, 3 Elkhorn Rd to Saddle Rd	Figure 4-5 Date: <i>February 2008</i>

- 1 Travel time for Preferred Alternative 2 will improve by 11 minutes over Alternative 1 No Build, and the LOS
2 at intersections and on the SH-75 mainline will see substantial improvement. Corridor delay during the peak
3 travel period will be more than halved. A minor shift to carpools will occur.

4 **Table 4-2: Comparative Peak Hour Travel Speed and LOS**

SH-75 Geographic Segments	Alternative 1: No Build		Preferred Alternative 2		Alternative 3			
	Speed	LOS	Speed	LOS	Speed	LOS		
US-20 to Gannett Road	40-45	D	45-50	C	45-50	C	No HOV operations in these sections.	
Gannett Road to Fox Acres Road								
• Gannett Road to Woodside Boulevard	25-30	E	40-45	B	40-45	B		
• Woodside Boulevard to Fox Acres Road	25-30	E	30-35	C	30-35	C		
Fox Acres to McKercher Boulevard	20 - 25	C	20 - 25	C	20 - 25	C		
					Alternative 3 (General purpose lane)		Alternative 3 (HOV Lane)	
	Speed	LOS	Speed	LOS	Speed	LOS	Speed	LOS
McKercher to Ohio Gulch	15-25	E/F	30-35	D	30-35	D	40-45	A
Ohio Gulch to Elkhorn	25-30	E	30-35	D	15-20	F	30-35	A
	Speed	LOS	Speed	LOS	Alternative 3		No HOV operations in these sections.	
Elkhorn to River Street	20-25	E	25-30	D	25-30	D		
River Street to Saddle Road	15-20	E	15-20	E	15-20	E		

- 5 Travel speeds throughout the SH-75 corridor will improve with the greatest improvements between Gannett
6 Road in southern Bellevue and Fox Acres Boulevard in Hailey, and between McKercher Boulevard and
7 Elkhorn Road. LOS relative to the No Build will also improve. In the urban section of the City of Hailey (Fox
8 Acres to McKercher Boulevard), travel speeds are set by the 25 mile per hour speed limit and will not be
9 affected by the Preferred Alternative.
- 10 Eleven intersections evaluated in the DEIS will have substantial improvement in LOS, as shown in bold in
11 Table 4-3.
- 12 Substantial reduction in travel times will occur in the Gannett Road and Fox Acres Road segment and the
13 McKercher Boulevard to Elkhorn Road segment.

1 In the event that HOV operations are implemented by ITD for the McKercher Boulevard to Elkhorn Road
2 segment, peak hour traffic performance is expected to be similar to that modeled for Alternative 3. Travel
3 performance is summarized in Tables 4-2 to 4-4 and shown in Figures 4-3 and 4-4. In summary, the LOS
4 in the HOV lane would be A for both the McKercher Boulevard to Ohio Gulch and Ohio Gulch to Elkhorn
5 segments, which is better than the projection of LOS D for both segments under the Preferred Alternative.
6 However, the LOS in the general purpose lane would be LOS D and LOS F for these two segments,
7 respectively, and speeds in the general purpose lane from Ohio Gulch to Elkhorn would be in the 15 to 20
8 mph range. Peak hour travel time for the HOV lane would be 16 minutes, about the same as for both lanes
9 in the Preferred Alternative, but the general purpose lane would be 27 minutes.

10
11 The projection that the travel time would be approximately the same for the HOV lane as for the two general
12 purpose lanes under the Preferred Alternative appears to be counterintuitive, since the HOV lane has a
13 better LOS and also a higher travel speed for the McKercher Boulevard to Ohio Gulch segment compared to
14 the same segments in Alternative 2. The travel demand forecasting modelers have confirmed this
15 projection, however, on the basis that the travel demand forecasting model indicates that many, but not a
16 majority, of the HOV vehicles enter the corridor north of McKercher Boulevard, or leave the corridor before
17 reaching Elkhorn Road.

18
19 During peak periods when the HOV lane is in operation in the travel model, vehicles turning onto and exiting
20 from SH-75 will need to merge into, or across, the HOV lane. HOV eligible vehicles making a left turn to
21 enter SH-75 must turn across the highly congested, much slower-flowing general purpose lane in order to
22 enter the HOV lane. During both the AM and PM peak, vehicles in the HOV lane that need to make a left
23 turn to exit SH-75 must merge left into the slower-moving general purpose lane to access the left turn lane.
24 For single occupant vehicles and other non-HOV lane eligible vehicles turning right onto SH-75, they must
25 first enter the HOV lane and then merge into the congested general purpose lane.

26
27 In both of the cases described above, HOV lane vehicles are delayed during the merge/weave movements
28 by a measurable amount, which results in delays to these vehicles that offset the improvement in travel time
29 compared to Preferred Alternative 2. Transit buses in the HOV lane will be slowing to enter the bus pullouts
30 to drop off and pick up passengers, also contributing to delay for HOV lane vehicles. The result is that for
31 the HOV lane, the average travel time is approximately the same as for vehicles traveling in either lane
32 under Preferred Alternative 2, about 16 minutes.

1

Table 4-3: Comparative Peak Hour Levels of Service for Intersections

SH-75 Intersection at	Year 2000	Year 2025 Alternative 1	Year 2025 Preferred Alternative 2	Year 2025 Alternative 3
US-20**	B	D	A	A
Gannett Road	B	E	B	B
Woodside Boulevard**	D	F	A	A
Countryside Road**	E	E	A	A
Fox Acres Road*	B	B	B	B
Bullion Street*	A	A	A	A
Myrtle Street**	D	F	A	A
McKercher Boulevard*	N/A	A	A	A
Deer Creek Road	C	F	D	F
East Fork Road*	C	C	C	F
Buttercup Road**	C	F	B	F
Ohio Gulch**	C	F	B	F
Broadway South	F	F	C	F
Hospital Drive/Broadway Run*	B	E	A	E
Elkhorn Road*	A	C	C	F
Serenade Lane	B	D	C	C
Sun Valley Road*	C	E	E	E

2

* Intersections with existing traffic signals ** Additional intersections signalized in Preferred Alternative

3

Table 4-4: Comparative Peak Hour Travel Time (Minutes)

SH-75 Geographic Segment	Alternative 1	Preferred Alternative 2	Alternative 3	Alternative 3 (General Purpose Lane)	Alternative 3 (HOV Lane)
US-20 to Gannett Road	12	11	11	11	
Gannett Road to Fox Acres Road	12	7	7	7	
Fox Acres Road to McKercher Boulevard	9	9	9	9	
McKercher Boulevard to Elkhorn Road	21	16	25	27	16
Elkhorn Road to River Street	3	3	3	3	
River Street to Saddle Road	3	3	3	3	
Total	60	49	60	60	49

4.1.2 Clarification of HOV Operations

During the development of the DEIS, the traffic operations analyses for Alternative 2 and for Alternative 3 were presented at public open houses, Work Group meetings, storefront office events, and at the public hearing. The analyses presented included the HOV operations as part of Alternative 3. Notwithstanding this information, Blaine County, the Cities of Bellevue, Hailey, Ketchum and Sun Valley, Blaine County Citizens for Smart Growth, and many individuals provided both verbal and written comment during the DEIS process, as well as on the DEIS that support HOV. These comments indicated that the County, Cities, other organizations, and individuals expect that the HOV lane will attract more users than the traffic analysis in this EIS predicts. They believe the continued development of programs to encourage and incentivize transit, carpooling, and changes to travel habits will support a much higher usage of the HOV lane.

The Blaine County Commissioners submitted a letter during the DEIS comment period that specifically requested additional information on the potential operations of HOV, should it be implemented. The specific comments and responses to them are included in Appendix B, pages B-19 to B-21. As the majority of SH-75 between McKercher Boulevard and Elkhorn Way lies within Blaine County and the Blaine County Sheriff's office will have primary responsibility for enforcing an HOV lane, the requested information is included in this FEIS.

Should ITD implement HOV operations under the conditions described in Section 2.2.2.2 (page 2-? of this FEIS), the curb lane from the intersection of McKercher Boulevard and SH-75 to the intersection of Elkhorn Road and SH-75 will operate as a designated HOV lane. The curb lane for northbound traffic will operate as an HOV lane during the morning peak period, while the southbound curb lane will operate as an HOV lane in the afternoon peak period. The HOV lane will be restricted to buses and other vehicles carrying two or more persons. Trucks less than 10,000 pounds gross weight with two or more persons will be allowed in the HOV lane. Large trucks, those heavier than 10,000 pound gross vehicle weight or with three or more axles, will be restricted from using the HOV lanes. This 10,000 pound threshold restriction is based on state-of-the-practice for HOV lanes in the United States and is intended to maximize the traffic operations of the HOV lane.¹⁸ The 8-foot shoulders will be used for enforcement by the Blaine County Sheriff's Department. The remaining through lane will be the designated general purpose lane (GP lane).

The HOV lane will begin for northbound traffic at the intersection of McKercher Boulevard and SH-75 and end at Elkhorn Road. The HOV lane will be ended at a point where the designated HOV lane will continue as a general purpose lane; for northbound traffic, this will be north of the Elkhorn Road intersection. For southbound traffic, the HOV designation will end at the McKercher Boulevard and SH-75 intersection. This approach to terminating the HOV operation at a geographic location where the roadway cross-section is a continuous five-lanes will minimize the accident risk. Ending or beginning the HOV operation after a traffic signal, and away from a location where the lane physically ends, minimizes traffic weaving and provides for more orderly traffic operations as vehicles distribute between the general purpose lane and the HOV lane. Advanced warning signs will be placed prior to and just after the signal to announce the end of the HOV lane designation (such as "HOV restriction ends, 1/2 mile" or "HOV restriction ends, 500 feet") to allow vehicles to safely distribute between two lanes. As the speeds approaching the SH-75 and McKercher Boulevard at the south terminus of HOV and SH-75 and Elkhorn Road at the north terminus of HOV will be 35 miles per hour or less, the ability of vehicles to weave and avoid accidents is improved over higher speed termination locations.

Traffic in the GP lane wishing to exit from SH-75 onto a side street or driveway will need to safely merge to the right across the HOV lane to make right turns. This merging of traffic will have a higher risk of vehicle

¹⁸ The traffic modeling for the SH-75 project excluded all trucks greater than 10,000 pounds gross weight from the HOV lane.

1 collisions than if both lanes were general purpose. To mitigate this risk, the HOV lane could be signed to
2 allow a certain length of road in advance of the right turn where both HOV traffic and right-turning vehicles
3 will be allowed.

4 Traffic on side streets wishing to turn right onto SH-75 from uncontrolled side streets will use the HOV lane
5 to accelerate and, if not eligible to use the HOV lane, merge into the GP lane. This maneuver will have
6 some risk of rear-end collisions with faster-moving HOV vehicle that come up behind general purpose lane
7 traffic merging left.

8 HOV restrictions may be difficult to enforce during heavy snow conditions. It is likely that during snow
9 emergencies, law enforcement staff will have a higher priority than enforcing HOV lane restrictions,
10 including incident management. Maintaining the visibility of lane markings during heavy snow events that
11 will enable enforcement of HOV restrictions will likely be difficult. Under what road conditions and how
12 information will be disseminated to the traveling public will be determined by the SH-75 Corridor Operations
13 Management Team.

14 **4.2 Other Transportation Modes**

15 The DEIS considered the impacts of Alternatives 2 and 3 on freight movements, transit operations, bicyclists
16 and pedestrian movements and crossings of SH-75. The description of the analysis of these modes in
17 Chapter 4 of the DEIS for these other transportation modes is still valid and generally unchanged in this
18 FEIS. A summary of these impacts is given below.

19 **4.2.1 Transit and HOV Vehicles**

20 The Preferred Alternative will provide buses and carpools with the same travel times and safety benefits as
21 other vehicles using the roadway. Buses will use the bus pullouts to pick up and discharge passengers.

22 Although a conversion to HOV operations is not part of the Preferred Alternative, this discussion is included
23 to inform Blaine County, the cities in the Wood River Valley, and other organizations and individuals who
24 provided comment on the DEIS that support HOV, and also because the potential future conversion to HOV
25 operations is reasonably foreseeable.

26 The impacts of HOV operations on transit were analyzed under Alternative 3 in the DEIS. This analysis is
27 relevant to a potential future conversion to HOV operations between McKercher Boulevard and Elkhorn
28 Road under the conditions described in Section 2.4 of this FEIS. As previously described, the local
29 governments believe that HOV operations will perform better than projected in the DEIS and this FEIS.

30 Should HOV operations between McKercher Boulevard and Elkhorn Road be implemented under the
31 conditions specified in Section 2.3.4 of this FEIS, buses, carpools and other HOV lane eligible vehicles will
32 have a travel-time advantage between McKercher Boulevard and Elkhorn Road, relative to vehicles in the
33 general purpose lane. This travel time for HOV lane users will be the same as for all users, including transit
34 and carpools, of both travel lanes under Alternative 2. Transit buses will have travel times longer than other
35 HOV lane users as they will be stopping to load and unload passengers, adding approximately 5 minutes to
36 the bus travel time. Bus transit users will have a six-minute travel-time advantage over the general purpose
37 lane user. Between US-20 and McKercher Boulevard, there will be no HOV operations. Vehicles carrying 2
38 or more persons and buses will operate in the general purpose lanes and will experience the same Levels of
39 Service and travel times described in Section 4.1 above.

40 **4.2.2 Freight Movement**

41 Freight movements under the Preferred Alternative will experience the same LOS and safer operations,
42 relative to the No Build, as other traffic. Other vehicles will be able to safely pass slower moving vehicles

1 using either the passing lanes in the US-20 to Gannett Road geographic segment, or one of the two travel
2 lanes throughout the rest of the SH-75 corridor. With the additional through lanes, center turn lane, 8-foot
3 shoulders, and right-turn lanes, truck traffic will experience greater levels of safety compared to Alternative 1
4 No Build.

5 The impacts of HOV operations on freight movement were analyzed under Alternative 3 in the DEIS. This
6 analysis is relevant to a potential future conversion to HOV operations between McKercher Boulevard and
7 Elkhorn Road under the conditions described in Section 2.4 of this FEIS. Should HOV operations be
8 implemented between McKercher Boulevard and Elkhorn Road, trucks over 10,000 pounds gross weight will
9 not be allowed in the HOV lane and will be restricted to the general purpose lane. Between McKercher and
10 Elkhorn, truck trip travel times will be the same as for other general purpose lane users.

11 As shown in Table 4-2, the LOS in the general purpose lane of the HOV section of SH-75 will be D from
12 McKercher Boulevard to Ohio Gulch and F from Ohio Gulch to Elkhorn Road. The stop-and-go conditions
13 typical of this level of congestion will increase the potential for trucks over 10,000 pounds gross weight to be
14 involved in rear-end accidents in the general purpose lane. Gaps in traffic from the traffic signal operations
15 at these intersections will enable slower, left-turning trucks to execute turns more safely across oncoming
16 traffic.

17 **4.2.3 Pedestrians and Bicyclists**

18 The Preferred Alternative will enhance pedestrian travel in the SH-75 corridor through the addition of
19 pedestrian underpasses at Treasure Lane, Spruce Way, and Buttercup/Zinc Spur. The installation of traffic
20 signals at the intersections of SH-75 and Myrtle Street in Hailey, Buttercup/Zinc Spur and Ohio
21 Gulch/Starweather will also facilitate pedestrian and bicyclist crossings of SH-75.

22 Bus pullouts will be incorporated into the Preferred Alternative to facilitate pedestrian access to transit and
23 support transit use. These will be provided at McKercher Boulevard, Buttercup Road/Zinc Spur, Ohio
24 Gulch/Starweather, East Fork Road, and Broadway Run/Hospital Drive. The Sun Valley Ketchum Transit
25 Authority (KART) and the Peak Bus service have recently been combined into a regional transit authority
26 and are beginning planning for a regional service and its infrastructure requirements. The resultant plan
27 may identify locations where additional bus pullouts and bus shelters are needed along SH-75. These
28 locations could then be incorporated into SH-75 during the design phase.